

(1) Distinct and easily recognizable changes in nearly all the cells of a segment of the spinal cord are found on the side of the lesion after section of an anterior root.

(2) Similar but less marked changes follow division of the facial nerve, and still less distinct alteration after division of the oculomotorius nerve.

(3) The fate of such altered cells and the ultimate condition of the nucleus of origin are not yet definitely ascertained.

(4) The age and nature of the animal experimented on is a factor in determining the rapidity and degree of alteration met with in nerve cells.

JELLIFFE.

PATHOLOGY.

230. ZUR LEHRE VON DER SYRINGOMYELIE (On Syringomyelia). L. Minor (Zeitschrift. f. Klin. Med. 34, 1898, p. 373).

The author presents a study of two cases of syringomyelia. The first case occurred in a one-year-old child, who from birth presented a number of anomalies of the nervous canal. It had spina bifida, meningocele and hydrocephalus. Microscopic examination showed hydromyelia, syringomyelia with duplication of the central canal with well marked continuity of the two cavities. In the second case similar teratological developments were noted. This second case was in a twelve-year-old girl, who died of a compression myelitis due to an endothelioma. Microscopically there was found in the upper segments of the dorsal cord a marked dilatation of the central canal. In this case the syringomyelia could be demonstrated, by a study of the serial sections, to have originated from a cut-off portion of the central canal. The author, as a result of his studies on these two cases, emphasizes the Leyden embryological view as to the origin of syringomyelia.

JELLIFFE.

231. SULLE LESIONI DEL SISTEMA NERVOSA CENTRALE PRODOTTE DAL BACILLO ICTEROIDE. Dott. A. Cesaris-Demel, Torino (Giornale della R. accademia di medicina di Torino, Marzo, 1898).

In the pathological laboratory of Professor Foa, of Turin, Dr. Cesaris-Demel experimented on the action of the bacillus of yellow fever as described by Sanarelli, on the central nervous system of dogs and rabbits, and came to the following conclusions:

(1) The icteroid bacillus produces in animals (dog and rabbit) important lesions in the cells of the central nervous system.

(2) These lesions affect principally: (a), the large and middle pyramidal cells of the cortex, which become swollen, lose their coloration and continuity of the chromophilic elements, arriving at a complete destruction of the cell; (b), the large cells of Purkinje which lose the coloration of the prolongations, and present a swelling of the basal part with intense chromatolysis and destruction of the cellular membrane; (c), the pyramidal cells of the anterior horns and of the oblongata, which present a conspicuous chromatolysis of a peripheral type.

(3) These lesions stand in relation to the gravity and extension and more or less susceptibility of the animal to the icteroid bacillus and the infection.

KRAUSS.

232. ZUR PATHOLOGIE DER EPILEPSIE (The Pathology of Epilepsy). N. Krainsky (Allg. Zeitsch. f. Psychiatrie, 54, 1897, p. 612).

From an extended series of examinations of the blood and urine the author comes to the general conclusion that the epileptic poison

is to be found in the blood. The chemical nature of this poison is similar to carbamic acid, and a detailed report is given of a series of experimental researches.

JELLIFFE.

CLINICAL NEUROLOGY.

233. EIN WEITERER FALL VON SOLITÄRER TUBERCULOSE DES RÜCKENMARKS, ZUGLEICH EIN BEITRAG ZUR LEHRE VON DER BROWN-SÉQUARD'SCHEN HALBSEITENLÄHMUNG. (Another Case of Solitary Tuberculosis of the Spinal Cord, at the Same Time a Contribution to the Brown-Séquard Paralysis). L. R. Müller (Deutsche Zeitschrift für Nervenheilkunde, vol. 12. 1898, p. 288).

A man, 46 years old, who had phthisis, became very weak in the right lower limb, while the power in the left was retained. He had retention of urine, exaggerated knee-jerk, especially on the right side, and disturbed sensation on the left side. The upper extremities were not affected. The senses of pain and temperature were completely lost on the left side below the ribs. The senses of touch, pressure and location were not disturbed anywhere. Sensation was somewhat impaired in a small area over the right nipple. A solitary tubercle was found in the right side of the second thoracic segment of the spinal cord. The left half of the cord was compressed by the growth, but otherwise very little altered. Although the clinical signs of spinal disease had lasted five weeks, secondary degeneration was not very important. A slight degeneration was noted in the left antero-lateral column, beginning a little above the tubercle. This, the writer believes, was due to destruction of the gray matter, especially of the posterior horn, on the right side. It is only in rare cases that the existence of this tract in the anterolateral column, arising in the contralateral gray matter, has been indicated by pathological findings. The vertebrae and membranes were normal. A slight degeneration of the posterior columns in the lower thoracic and lumbar regions was supposed to be similar to that seen in pernicious anemia and marasmus. The diagnosis of a solitary intramedullary tumor in the right half of the cord was made before death, and was founded on clinical phenomena, in a phthisical patient, indicating a partial transverse lesion. The free movement of the vertebral column, the absence of painful areas along the spine, the painless development of the hemiplegia, were regarded as indicative of the integrity of the spinal vertebrae and membranes. Müller agrees with Bruns that in spinal paraplegia the lesion is usually located too low in the cord.

Although only one-half of the cord was destroyed, the paralysis was not truly of the Brown-Séquard type. The weakness of the right lower limb did not amount to paralysis, and the disturbance of sensation on the left side was syringomyelic in type. The existence of naked axis cylinders, which escaped detection within the tubercle, may possibly explain the partial paralysis, but not the disturbed sensation. The views concerning Brown-Séquard paralysis are correct as regards pain and temperature senses, but not as to tactile sense; the former senses, the author thinks, are altered by lesion of the posterior horn of the side on which the fibres enter the cord, and by lesions of the anterolateral column of the opposite side.

SPILLER.

234. SUR UN CAS DE MYÉLITE SUBAIGUE DORSO-LOMBAIRE [Sub-Acute Dorso-lumbar Myelitis (due probably to infection by way of the uterus)]. Mongorier et Carrière (La Presse Médicale, Vol. 55. 1897, p. 8).

The authors describe a case of myelitis affecting the portion of the cord below the seventh dorsal segment, and give a very complete